SIDE-POWER
Thruster Systems

PJC-322/321
S-link
Control Panel

Keep this manual onboard !

GB **Installation and user's manual**

N **Installasjons og brukermanual**

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Made in Norway

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PJC-322 / 321

Control panel with S-link™ CAN-bus connection

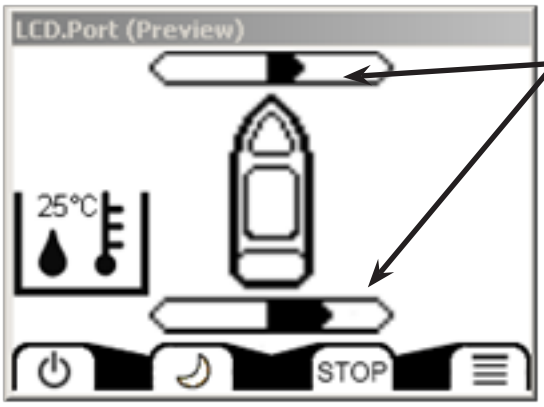
Product features

- For proportional thruster control with the new S-Link controlled Hydraulic Thrusters
- Back-lit LCD display with instant feedback
  - System status
  - Amount of thrust & direction of thrust
  - Oil temperature & pressure
- Interactive multi-language menus
- CAN-Bus communication with thrusters and accessories
- Plug & play cables, waterproof and compact connectors
- Diagnostics via panel
- Connector for external "buzzer"/loud audible alarms

DISPLAY IN NORMAL USE:

1 hydraulic tank

Oil Temperature

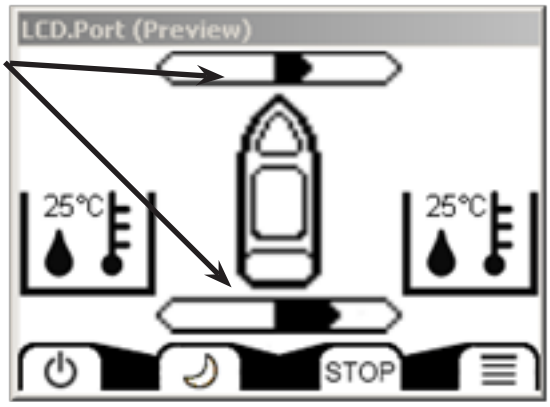


Thrust power and direction

2 hydraulic tanks

Oil Temperature, Port Tank

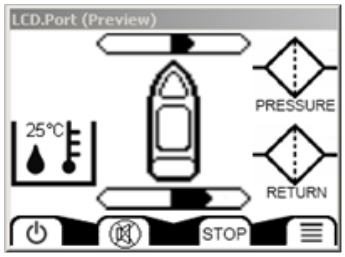
Oil Temperature, Starboard Tank



Buttons/Indications on screen - left to right:
ON/OFF - DAYTIME/NIGHT Backlight mode - EMERGENCY STOP - SETTINGS MENU

DISPLAY WARNINGS & ALARMS:

FILTER MONITORING WARNINGS (IF SENSORS ARE INSTALLED)
PRESSURE FILTER:
Pressure filter symbol (upper right) will blink when filter change is due. In addition red LEDs on both sides of the panel will blink and the external buzzer is activated.

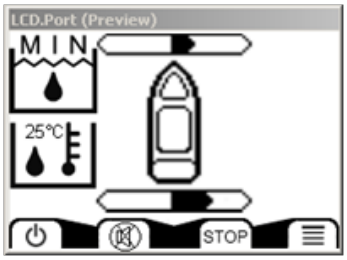


RETURN FILTER:
Return filter symbol (lower right) will blink when the filter needs to be replaced. In addition red LEDs on both sides of the panel will blink and the external buzzer is activated.

The external buzzer can be muted by pressing the button under the loud-speaker symbol. Warnings will be reset when the filter are replaced.

The thrusters can be run while the warnings is displayed.
(Filter warnings will not be shown on systems with two oil tanks)

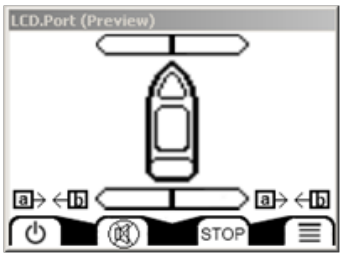
ALARMS (Systems with one oil tank)
OIL LEVEL:
Oil level symbol (upper left) will blink when oil level is low. In addition red LEDs on both sides of the panel will blink and the external buzzer is activated.
The alarm will be reset automatically when the oil level is OK



OIL TEMPERATURE:
Oil temperature symbol (lower left) will blink when temperature is above 75^{O}C. In addition red LEDs on both sides of the panel will blink and the external buzzer is activated. The alarm will be reset automatically when temperature goes below 65^{O}C

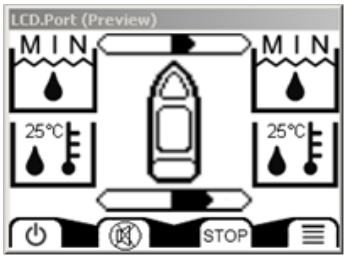
The thrusters can be run when the oil alarms are active.

COMMUNICATION ERROR: a→ ←b
If there is a communication error between the panel and the system control unit located on the oil tank, the comm error symbol will be shown on the lower left side of the panel



The external buzzer can be muted by pressing the button under the loud-speaker symbol.

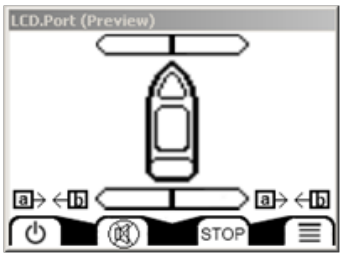
ALARMS (Systems with two oil tanks)
OIL LEVEL:
Oil level symbol (upper left/right) will blink when oil level is low. In addition red LEDs on both sides of the panel will blink and the external buzzer is activated.
The alarm will be reset automatically when the oil level is OK



OIL TEMPERATURE:
Oil temperature symbol (lower left/right) will blink when temperature is above 75^{O}C. In addition red LEDs on both sides of the panel will blink and the external buzzer is activated. The alarm will be reset automatically when temperature goes below 65^{O}C.

The thrusters can be run when the oil alarms are active.

COMMUNICATION ERROR: a→ ←b
If there is a communication error between the panel and the system control unit located on the oil tank, the comm error symbol will be shown on the lower left/right side of the panel

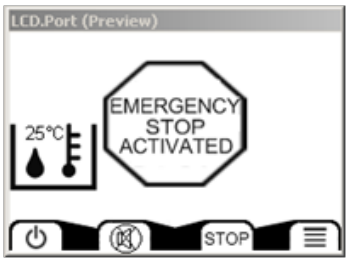


Symbols on left side indicates port tank, symbols on right indicates starboard tank.

The external buzzer can be muted by pressing the button under the loud-speaker symbol.

EMERGENCY STOP:

When the STOP button is pressed, the hydraulic dump valve will activate and the thrusters will stop. On systems with two oil tanks, dump valves on both tanks will activate and all thrusters will stop.



The EMERGENCY STOP ACTIVATED sybol will be shown on the display. In addition red LEDs on both sides of the panel will blink and the external buzzer is activated.

NB: FOR EMERGENCY STOP ONLY!

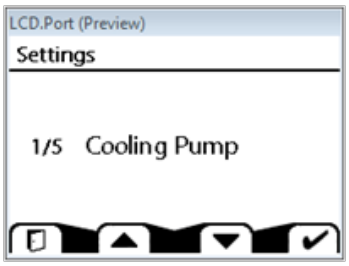
Press STOP again to reactivate the hydraulic system.

The external buzzer can be muted by pressing the button under the loud-speaker symbol.

MENU SYSTEM:

Access menu system by pressing menu button

SETTINGS
The menu system contains of 5 settings:
1 - Cooling Pump
2 - Pump Settings
3 - Language
4 - Display Settings
5 - Automatic OFF time

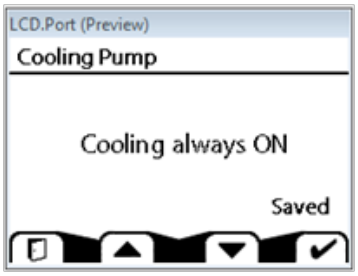


Select settings

Ends settings

Chooses function

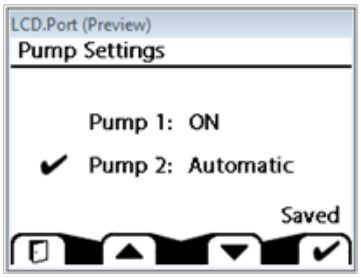
1/5 Cooling Pump
The cooling pump can be set to "always ON" or "Automatic".
When the option "Automatic" is selected, the cooling pump will start when oil temperature exceeds 50^{O}C and stop when the oil temperature goes below 40^{O}C.



On systems with two oil tanks, this setting will apply to both tanks.

2/5 Pump Settings
Use ▲▼ to choose between Pump 1 or Pump 2 and select by pressing ✔.
When a pump is choosen, switch between available settings with ▲▼.
Use ✔ to save settings.

PUMP 1 (PTO-mounted): Pump can only be set to OFF or ON
PUMP 2 (PTO-mounted): Pump can be set to ON or AUTO

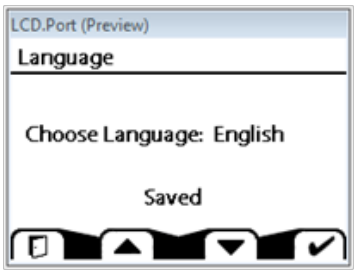


When pump 2 is set to AUTO and an SPS stabilizer is active, the pump will start when oil pressure goes below 80 Bar and run for 15 minutes or when a thruster is running.

When an SPS Stabilizer is not active, Pump 2 will always run. AUTO is used when the SPS stabilizer is installed to save fuel/energy while the stabilizer system is running. On systems with two oil tanks, the settings will apply for both tanks.

NB: "Pump 2: AUTO" must only be used on PHC 024 with firmware v.1.008 or newer!

3/5 Language
Choose between English, Norwegian, German, French, Spanish or Italian.
The setting will not affect other panels in the system.

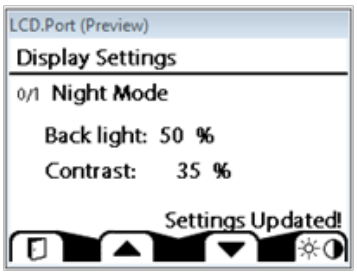


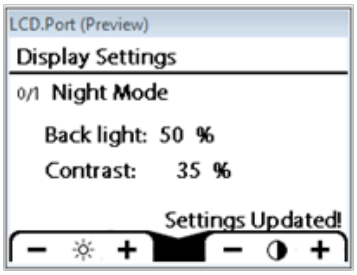
4/5 Display settings
Set contrast and backlight level for Daytime/Night modes
Settings will not affect other panels in the system.

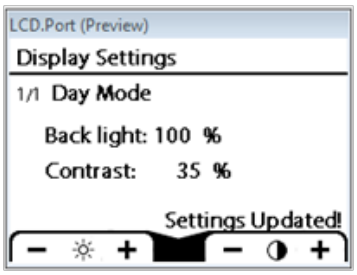
Press ☼◑ to start adjustment - Press + or - to adjust contrast or backlight.

Use ▲▼ to switch between daytime or night settings.
End setting by pressing ◧

Adjustments will automatically end after 3 seconds of inactivity.







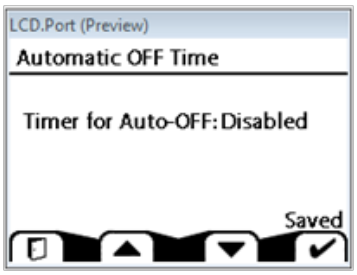
5/5 Automatic OFF time
Set time from last activity to Panel automatically turns off.
The time can be set at 5 minutes interval, ranging from 5 to 60 minutes - or be disabled. When "Disabled" is selected, the panel will never be turned off automatically.

Settings will not affect other panels in the system.

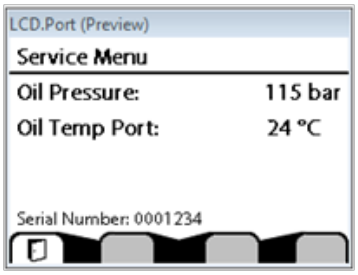
Press ▲▼ to adjust time in 5 minutes intervals.

End setting by pressing ◧

Store settings by pressing ✔



SERVICE MENU (Systems with one oil tank)
Access SERVICE MENU by pressing MENU button and hold it for 5 Seconds

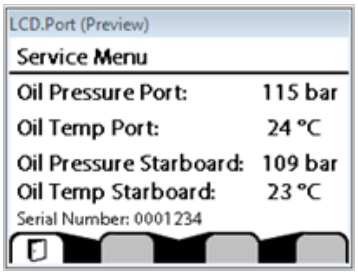


Shows oil pressure and temperature in the hydraulic tank as well as the serial number of the panel.

Thrusters can be operated while this display is shown.

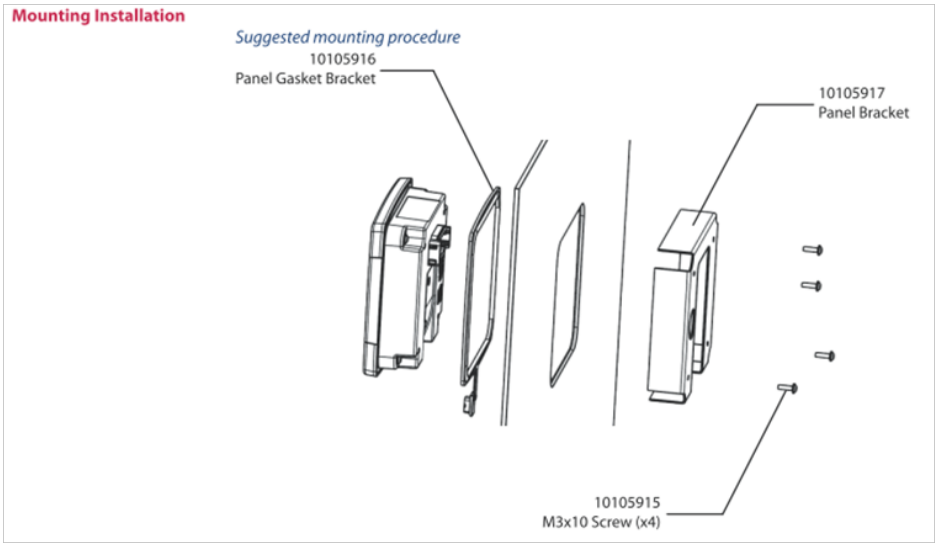
Exit Service Menu by pressing

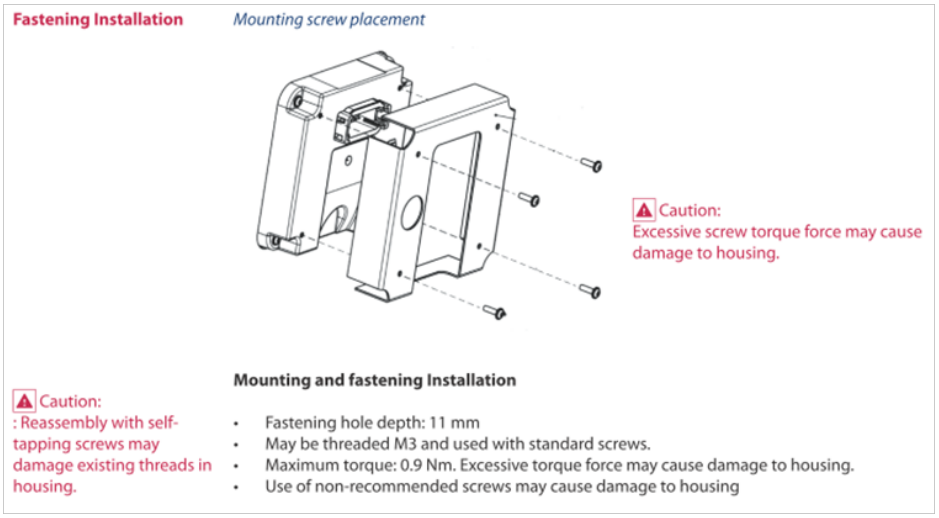
SERVICE MENU (Systems with two oil tanks)
Shows oil pressure and temperature in both hydraulic tanks as well as the serial number of the panel.



Thrusters can be operated while this display is shown.

Exit Service Menu by pressing

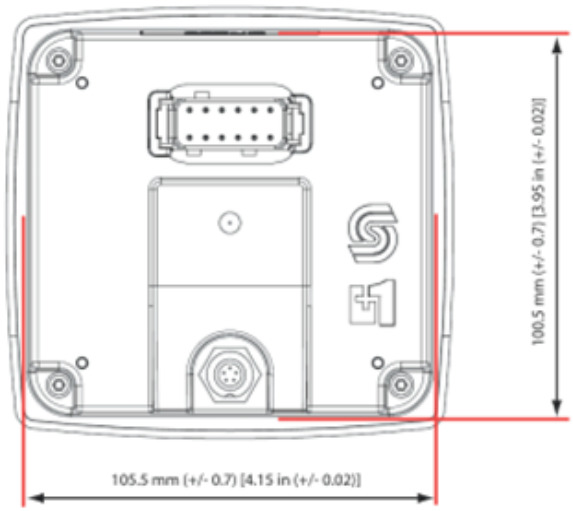



Fastening Installation
Mounting screw placement
Caution:
Excessive screw torque force may cause damage to housing.
Caution:
: Reassembly with self-tapping screws may damage existing threads in housing.
Mounting and fastening Installation
• Fastening hole depth: 11 mm
• May be threaded M3 and used with standard screws.
• Maximum torque: 0.9 Nm. Excessive torque force may cause damage to housing.
• Use of non-recommended screws may cause damage to housing

TECHNICAL SPECIFICATIONS, LCD DISPLAY:
IP 67
Low temp functionality (-40^{O}C)
Mounting bracket
Alarm output max load 200mA
Input voltage 9 - 31V
Max current consumption 110mA

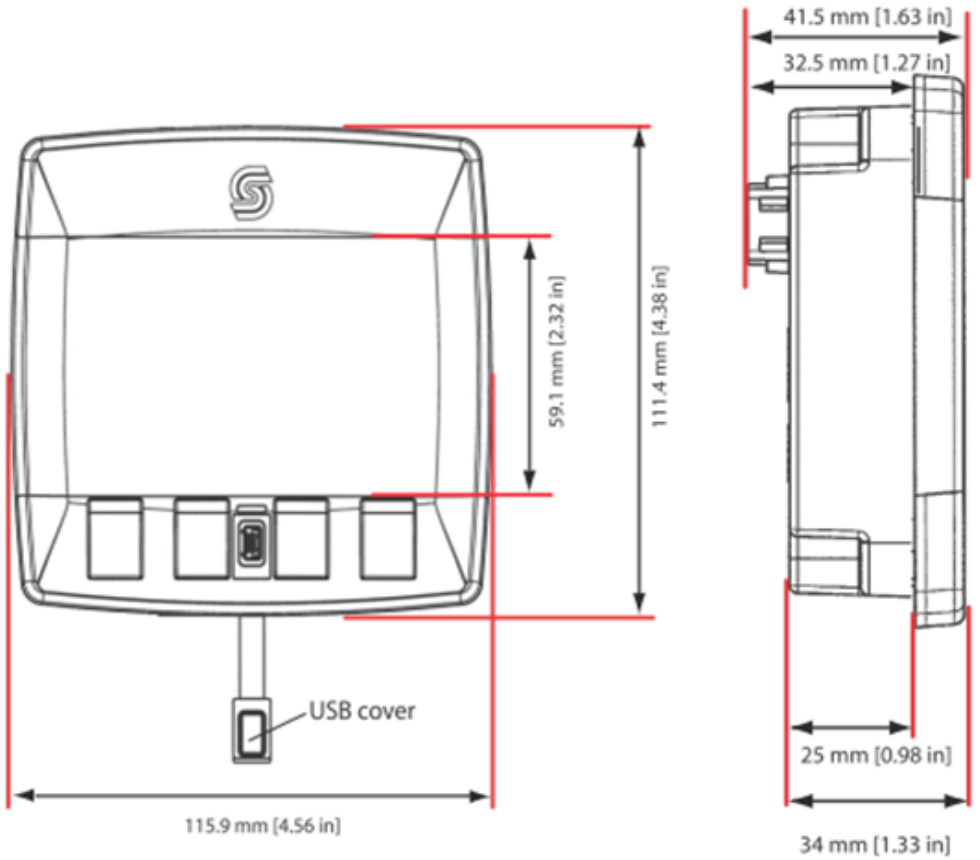
Measurements

DP2XX Panel Install Dimensions



Caution:
Oversized panel cutouts may jeopardize product IP rating.

DP2XX Dimensions



- Gasket seal area crosshatched
- Panel thickness: 2-5 mm

Service Centres

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